

Title (en)  
DRIVE DEVICE

Title (de)  
ANTRIEBSVORRICHTUNG

Title (fr)  
DISPOSITIF D'ENTRAÎNEMENT

Publication  
**EP 2944846 A1 20151118 (EN)**

Application  
**EP 13870548 A 20131216**

Priority  
• JP 2013001475 A 20130109  
• JP 2013083615 W 20131216

Abstract (en)  
A wave motion gearing speed reducer (20) is disposed between a driving motor (15) and a control shaft (11) of a variable compression ratio mechanism. There are provided a input shaft rotation sensing sensor (31) to sense the rotational position of an input shaft (16) of the speed reducer (20), and an output shaft rotation sensing sensor (32) to sense the rotational position of an output shaft (12) of the speed reducer (20). When a discrepancy quantity (#μ) between sensed quantities of both sensors is greater than or equal to a predetermined value, a judgment is made that a ratcheting of slippage of an engaging position between internal teeth (22) and external teeth (25) is generated.

IPC 8 full level  
**F16H 1/32** (2006.01); **F16H 49/00** (2006.01)

CPC (source: CN EP RU US)  
**F02B 75/04** (2013.01 - US); **F02B 75/045** (2013.01 - EP US); **F16H 1/32** (2013.01 - RU); **F16H 49/001** (2013.01 - CN EP US); **F16H 57/01** (2013.01 - CN EP US); **F02D 15/02** (2013.01 - EP US); **F16H 2057/012** (2013.01 - EP US); **F16H 2057/016** (2013.01 - EP US); **F16H 2057/018** (2013.01 - CN EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 2015292400 A1 20151015**; **US 9476354 B2 20161025**; BR 112015016574 A2 20170711; BR 112015016574 A8 20191029; BR 112015016574 B1 20210629; CN 104919210 A 20150916; CN 104919210 B 20170825; EP 2944846 A1 20151118; EP 2944846 A4 20160427; EP 2944846 B1 20190515; JP 5884924 B2 20160315; JP WO2014109179 A1 20170119; MX 2015008651 A 20151012; MX 348597 B 20170621; RU 2585699 C1 20160610; WO 2014109179 A1 20140717

DOCDB simple family (application)  
**US 201314443853 A 20131216**; BR 112015016574 A 20131216; CN 201380069996 A 20131216; EP 13870548 A 20131216; JP 2013083615 W 20131216; JP 2014556349 A 20131216; MX 2015008651 A 20131216; RU 2015132963 A 20131216